

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. – 40. (CANCELLED).

41. (WITHDRAWN) The liquid crystal display device as set forth in claim 56, wherein:

the drive circuit stores an optimum level of an overshoot signal as a Look-up Table; and

the optimum level of the overshoot signal is obtained by an evaluation method that has the steps of repeatedly supplying to the liquid crystal panel, (i) a signal corresponding to an original tone, (ii) an overshoot signal, and (iii) a signal corresponding to an attainment tone sequentially in this order while sweeping a level of the overshoot signal, so as to analyze display results of the liquid crystal panel; and in accordance with analysis results, determining the optimum level of the overshoot signal in association with the original tone and the attainment tone.

42. (CANCELLED).

43. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 56, wherein:

the drive circuit stores as a Look-up Table an optimum combination of a plurality of levels of the overshoot signal in predetermined tone transition; and

the optimum combination is set to a combination of levels of the overshoot test signal that corresponds to an optimum one of display results, which is obtained by repeatedly supplying to the

liquid crystal panel, a signal corresponding to the original tone and then the overshoot test signal having a plurality of levels while sweeping the levels of the overshoot test signal, so as to analyze the display results of the liquid crystal panel.

44. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 56, wherein:

the drive circuit stores as a Look-up Table an optimum combination of a level of the overshoot signal and a level of an undershoot signal in predetermined tone transition; and

the optimum combination is set to a combination of a level of the undershoot test signal and a level of the overshoot test signal that corresponds to an optimum one of display results, which is obtained by repeatedly supplying to the liquid crystal panel, a signal corresponding to the original tone, the undershoot test signal, and the overshoot test signal sequentially in this order while sweeping the levels of the undershoot and overshoot test signals, so as to analyze the display results of the liquid crystal panel.

45. (CANCELLED)

46. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 56, wherein:

the Look-up Table is stored with respect to each of a plurality of temperatures.

47. – 55. (CANCELLED) .

56. (PREVIOUSLY PRESENTED) A liquid crystal display device which includes a liquid crystal

panel and a drive circuit, wherein:

the drive circuit stores as a Look-up Table an optimum level of a test signal consisting of either only an overshoot signal or both an overshoot signal and an undershoot signal in accordance with tone transition from an original tone to an attainment tone; and

the optimum level is set to a level of the test signal that corresponds to an optimum one of display results, which is obtained by an evaluation method that has the steps of repeatedly supplying to the liquid crystal panel, (i) a signal corresponding to an original tone and then, in accordance with tone transition, (ii) the test signal, that is either only the overshoot signal or both the overshoot signal and the undershoot signal, and (iii) a signal corresponding to an attainment tone sequentially in this order while sweeping a level of the test signal, so as to analyze display results of the liquid crystal panel; and in accordance with analysis results, determining the optimum level of the test signal in association with the original tone and the attainment tone,

wherein the optimum one of the display results is a display result of the display results where the attainment tone is substantially displayed faster than a remainder of the display results without exceeding the attainment tone.

57. (WITHDRAWN) The liquid crystal display device as set forth in claim 41, wherein:

the drive circuit supplies to the liquid crystal panel a video signal whose level changes from A to C, then from C to B, where A is a level corresponding to a tone before being changed, B is a level corresponding to a tone to be attained, and C is a level of an overshoot signal (including a case where $C = B$), while sweeping the level of the overshoot signal C; and

in the Look-up Table, stored is, in association with the tone before being changed and the tone to be attained, a level of the overshoot signal C that realizes a response waveform which reaches the tone to be attained fastest without overresponse, among response waveforms obtained

while sweeping the level of the overshoot signal C.

58. (WITHDRAWN) The liquid crystal display device as set forth in claim 56, wherein:
the drive circuit stores an optimum level of an overshoot signal as a Look-up Table; and
in the Look-Up Table, analyzed are waveforms of the output of a display image of the liquid crystal panel so as to obtain (i) relationship between a maximum or minimum level in each of the waveforms and a level corresponding to a desired attainment tone, and (ii) a time required for substantially attaining the level corresponding to the desired attainment tone, and stored is, in association with the original tone and the attainment tone, as the optimal level of the test signal, a level of the overshoot signal that corresponds to an optimum one of the waveforms in accordance with analysis results.

59. – 60. (CANCELLED).

61. (CURRENTLY AMENDED) A liquid crystal display device which includes a liquid crystal panel and a drive circuit, wherein:

the drive circuit stores as a Look-up Table an optimum level of a test signal consisting of either only an overshoot signal or both an overshoot signal and an undershoot signal in accordance with tone transition from an original tone to an attainment tone; and

the optimum level of the test signal is obtained by an evaluation method that has the steps of repeatedly supplying to the liquid crystal panel, (i) a signal corresponding to an original tone, (ii) the test signal, and (iii) a signal corresponding to an attainment tone sequentially in this order while sweeping a level of the test signal, wherein the level of the test signal at each trial of the sweeping is selected and tested in turn from a plurality of predetermined levels and without calculation of an

ideal optimum level of the test signal, so as to analyze display results of the liquid crystal panel; and in accordance with analysis results, determining the optimum level of the test signal in association with the original tone and the attainment tone, wherein the optimum level is set to a level of the test signal that corresponds to an optimum one of the display results and wherein the optimum one of the display results is a display result of the display results where the attainment tone is substantially displayed faster than a remainder of the display results without exceeding the attainment tone.

62. (PREVIOUSLY PRESENTED) The crystal display device as set forth in claim 61, wherein the level of the test signal at each trial of sweeping is selected and tested in turn from a plurality of predetermined levels without calculation of a predicted value of an ideal optimum level of the test signal based on the original tone or the attainment tone, and regardless of the predicted value.

63. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 62, wherein the level of the test signal at each trial of the sweeping is selected and tested in turn from the plurality of predetermined levels which satisfy a rule that the level is equal to or more than a level which corresponds to the attainment tone in case of overshoot and is equal to or less than a level which corresponds to the attainment tone in case of undershoot.

64. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 61, wherein:

the drive circuit stores as a Look-up Table an optimum combination of a plurality of levels of the overshoot signal in predetermined tone transition; and

the optimum combination is set to a combination of levels of the overshoot test signal that

corresponds to an optimum one of display results, which is obtained by repeatedly supplying to the liquid crystal panel, a signal corresponding to the original tone and then the overshoot test signal having a plurality of levels while sweeping the levels of the overshoot test signal, so as to analyze the display results of the liquid crystal panel.

65. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 61, wherein:

the drive circuit stores as a Look-up Table an optimum combination of a level of the overshoot signal and a level of an undershoot signal in predetermined tone transition; and

the optimum combination is set to a combination of a level of the undershoot test signal and a level of the overshoot test signal that corresponds to an optimum one of display results, which is obtained by repeatedly supplying to the liquid crystal panel, a signal corresponding to the original tone, the undershoot test signal, and the overshoot test signal sequentially in this order while sweeping the levels of the undershoot and overshoot test signals, so as to analyze the display results of the liquid crystal panel.

66. (CANCELLED).

67. (PREVIOUSLY PRESENTED) The liquid crystal display device as set forth in claim 61, wherein:

the Look-up Table is stored with respect to each of a plurality of temperatures.

68. (CANCELLED).